

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) An optical module comprising:

an elongated optical waveguide having multiple cores buried in a clad;

a rectangular-shaped silicon optical waveguide substrate, on which said optical waveguide is mounted, and ~~on~~along both ~~sides~~side edges of an upper surface thereof high precision steps are formed ~~along~~extending in a longitudinal direction of the waveguide substrate; and

an optical fiber connecting end member including guide pin insertion holes for inserting guide pins and a through hole for accommodating and fixing an end surface of the optical waveguide substrate,

wherein on an inside of the through hole, steps are formed along both side edges of an inner surface of the through hole so as to fit the high precision steps when the waveguide substrate is inserted in the through hole.
2. (Currently amended) ~~A substrate~~ An optical module according to claim 1 wherein an optical element is mounted on and connected to said optical waveguide.
3. (Currently amended) ~~A substrate~~ An optical module according to claim 1 wherein an inclined ~~grooves~~groove that ~~incline~~inclines relative to the ~~propagation~~longitudinal direction of the ~~light~~are optical waveguide is formed on said optical waveguide, and a light reflecting device that reflects light propagated along said optical waveguide to the outside of said optical waveguide is provided ~~on~~in said inclined ~~grooves~~groove.

4. (Currently amended) ~~A substrate~~ An optical module according to claim 1 wherein an inclined grooves-groove that ~~incline-inclines~~ relative to the ~~propagation-longitudinal~~ direction of the ~~light~~ are optical waveguide is formed on said optical waveguide, and an optical wavelength selecting device that selects ~~the~~ light having a wavelength in a desired range from the light propagated through said optical waveguide and extracts ~~it~~ the selected light to the outside of said optical waveguide is provided ~~on~~ in said inclined groove.

5. (Canceled)

6. (Currently amended) An optical waveguide substrate for use with an optical fiber connecting end member having formed therein a hole for accommodating and fixing one end of said substrate and optically connecting ~~the-said~~ the substrate to ~~the~~ an optical fiber, wherein steps for positioning ~~said-the~~ the substrate in the end member are formed ~~on~~ along both side edges of the substrate-in said hole.

7. (Currently amended) An optical element housing member having formed therein a hole for accommodating and fixing one or the other end of ~~said-a~~ a substrate and optically connecting the substrate to an optical element, wherein steps for positioning ~~said-the~~ the substrate are formed ~~in-said~~ along both side edges of an inner surface of the hole.

8-12. (Canceled)

13. (New) An optical module according to claim 1, wherein an optical element is

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on said waveguide substrate and optically connected to said optical waveguide.

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AMENDMENTS TO THE DRAWINGS:

Corrected drawings of Figures 11 and 15-19 are submitted herewith.